

NIXON VANDERHYTE PC Fax 703+816+4100 Aug 20 2007 12:40pm P001/007  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Before the Board of Patent Appeals and Interferences

✓ In re Patent Application of

HARRIS et al.

Serial No. 10/529,055

Filed: March 24, 2005

Title: BISTATIC LASER RADAR APPARATUS

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Atty Dkt. SCS-124-1111

C# M#

TC/A.U.: 3662

Examiner: T. Brainard

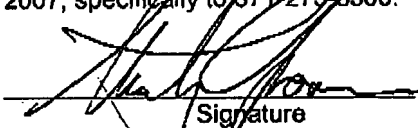
Date: August 20, 2007

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☐ Correspondence Address Indication Form Attached.

☒ **NOTICE OF APPEAL**

Applicant hereby **appeals** to the Board of Patent Appeals and Interferences from the last decision of the Examiner twice/finally rejecting applicant's claim(s).

\$500.00 (1401)/\$250.00 (2401) \$ 500.00

☐ An appeal **BRIEF** is attached in the pending appeal of the above-identified application

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☐ Credit for fees paid in prior appeal without decision on merits

-\$ ( )

☐ A reply brief is attached in triplicate under Rule 41.41

(no fee)

☒ Pre-Appeal Brief Request for Review form attached.

☐ Petition is hereby made to extend the current due date so as to cover the filing date of this paper and attachment(s)

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Any future submission requiring an extension of time is hereby stated to include a petition for such time extension. The Commissioner is hereby authorized to charge the above-noted fee(s), any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A duplicate copy of this sheet is attached.

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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)
		SCS-124-1111
Application Number	Filed	
10/529,055	March 24, 2005	
First Named Inventor	HARRIS	
Art Unit	Examiner	
3662	T. Brainard	
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the <input type="checkbox"/> Applicant/Inventor <input type="checkbox"/> Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) <input checked="" type="checkbox"/> Attorney or agent of record <u>27,393</u> (Reg. No.) <input type="checkbox"/> Attorney or agent acting under 37CFR 1.34. Registration number if acting under 37 C.F.R. § 1.34 _____</p> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.*</p> <p><input checked="" type="checkbox"/> *Total of 1 form/s are submitted.</p>		

  
Signature  
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August 20, 2007  
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This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**STATEMENT OF ARGUMENTS IN SUPPORT OF  
PRE-APPEAL BRIEF REQUEST FOR REVIEW**

The following listing of clear errors in the Examiner's rejection and his failure to identify essential elements necessary for a *prima facie* basis of rejection is responsive to the Final Official Action mailed May 23, 2007.

**Error #1. The Examiner appears to ignore the requirements that each independent claim is a "bistatic" laser radar device**

Where the preamble of a claim is "'necessary to give life, meaning and vitality' to the claim, then the claim preamble should be construed as if in the balance of the claim." MPEP §2111.02 quoting *Pitney Bowes v. Hewlett-Packard Co.*, 51 USPQ2d 1161, 1165-66 (Fed. Cir. 1999).

The preamble of each of Applicants' independent claims 1, 18 and 21 defines the claimed device as being a "bistatic" laser radar device. The term "bistatic" is defined in Applicants' specification, page 2, lines 3 and 4, as "having separate transmit and receive optics." Thus, the cited prior art must disclose bistatic devices having separate transmit and receive optics in order to be pertinent to the claimed invention.

While transmit and receive optics are shown in the Ehbets reference, they are not shown in the Zincone reference. In fact, the Zincone reference, in teaching a single "laser airspeed unit 11," (a combined transmit and receive unit) would lead one of ordinary skill in the art away from a bistatic laser radar device and certainly does not address the problem solved by the claimed bistatic invention.

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**Error #2. The Examiner fails to demonstrate that the cited prior art teaches a "variable focus transmit beam"**

The Zincone reference discloses a movable lens 26 which has a variable focus effect but teaches that this is in combination with a monostatic system, i.e., a single transmit/receive optical channel. Ehbets teaches only a fixed and unfocused transmit beam (which is not focused at all, but rather, is emitted through "a collimator objective lens 12 in the direction of the optical axis 13 as a parallel beam . . . ." (Column 5, lines 4-7)). In fact, The Examiner admits that "Ehbet does not teach a variable focus transmit beam." (Final Rejection, page 2 ). As is well known to those skilled in the optical art, a parallel beam is not focused and a collimator lens provides an unfocused parallel beam of light.

Therefore, Zincone is not analogous prior art and Ehbets, not only fails to teach a variable focus transmit beam, leads one of ordinary skill in the art away from the claimed subject matter by instead teaching a non-variable, non-focused, fixed parallel beam of light.

**Error #3. The prior art fails to disclose a "variable focus receive beam"**

Zincone would appear to teach a variable focus lens on a monostatic laser system in which there is only a single transmit/receive optical path, thereby teaching away from application to a bistatic laser system.

Ehbets fails to teach the claimed "receive channel for forming a variable focus receive beam." While the position of the Ehbets receive sensor is moved transversely to the optical axis, there is no movement along the optical axis which could variably focus the received beam.

Therefore, Zincone is non-analogous monostatic art and Ehbets, in teaching a fixed focus optical path in a bistatic device, teaches away from the claimed variable focus receive channel.

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**Error #4. No prior art reference teaches the claimed interrelationship that "all points of focus of the transmit beam and all points of focus of the receive beam fall on a common axis within the operable distance range of the device"**

All of applicants' independent claims require that the points of focus of both the transmit and receive beams fall "on a common axis." Zincone, which at best teaches a non-analogous monostatic laser system, utilizes a single transmit and receive optical system and therefore all points of focus may be coincident. However, because Zincone relate to a monostatic system rather than Applicants' claimed bistatic system, it does not provide the benefits of a bistatic laser radar or even suggest the problems of a bistatic radar which are solved by the present invention.

Ehbets, in teaching a non-focused transmit beam (i.e., a fixed and unfocused collimated beam) and a fixed focus receive channel, cannot meet the requirement that all points of focus of the transmit beam and receive beam fall on a "common axis" Clearly no prior art suggests a bistatic system in which the points of focus fall on a "common axis."

**Error #5. The Examiner fails to appreciate that neither Ehbets nor Zincone teach the claimed subject matter**

Even if Ehbets and Zincone were combined, the Examiner would have to pick and chose elements from the Ehbets and Zincone references and then combine them as taught only by applicant's claims.

Assuming one of ordinary skill in the art would utilize the Ehbets bistatic arrangement one would disregard the inconsistent Zincone monostatic system. However, that person would have to use the Zincone variable focus transmit channel instead of the fixed and unfocused

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transmit channel as taught in Ehbets. Additionally, the person of ordinary skill would have to pick the variable focus receive channel from Zincone's monostatic system and apply this to the Ehbets bistatic system. The person of ordinary skill would then have to realize that a benefit in having the focus of the two separate transmit and receive channels fall "on a common axis" (as in the non-analogous Zincone system) and then apply that to the fixed and unfocused Ehbets transmit system and the fixed focus receive system.

As can be seen, one would have to pick and choose features of the Ehbets and Zincone references and then combine them only in the manner suggested by Applicants' independent claims 1, 18 and 21. The Examiner has identified no suggestion for such combination anywhere in the Ehbets and Zincone references.

The Examiner has failed to provide any "reason" or "motivation" for picking and choosing elements from the non-analogous monostatic Zincone reference and bistatic Ehbets reference and has failed to provide any motivation for combining these elements in the manner of Applicants' claims. Accordingly, there is simply no basis for independent claims 1, 18 and 21 being considered obvious in view of the Ehbets/Zincone combination and any further rejection thereunder is respectfully traversed.

**Error #6. The Examiner fails to appreciate that both Ehbets and Zincone would lead one of ordinary skill in the art away from Applicants' combination claims**

As noted above, the Ehbets reference teaches the use of a fixed and non-focused transmit beam which requires one of ordinary skill to disregard this analogous art teaching. The Examiner provides no reason why one of ordinary skill in the art would ignore this pertinent art and instead substitute a variable focus transmit system from the non-analogous Zincone

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reference which is a monostatic laser radar device. The Examiner provides no reason or rationale why one of ordinary skill in the art would utilize a variable focus receive channel as taught by Zincone's monostatic laser device and instead substitute this feature for the fixed focus receive channel in the analogous Ehbets reference.

Moreover, the Examiner completely avoids the fact that in a monostatic laser radar device such as Zincone, all points of focus are on "a common axis" and that, as discussed in Applicants' specification, it is the requirement of bistatic laser radar systems that requires the variable focus. Because both Ehbets and Zincone would clearly lead one of ordinary skill in the art away from Applicants' combination of elements, this is clear evidence of non-obviousness under 35 USC §103.

In view of the above, there is no reason to combine Ehbets and Zincone and indeed each of these references would teach away from the combination thereof. Each of the rejections under 35 USC §103 are in view of a combination of Ehbets and Zincone and therefore each ground of rejection is respectfully traversed for all of the above reasons.

#### SUMMARY

As discussed in detail above, the Zincone reference teaches a monostatic device non-analogous to the claimed bistatic device. Ehbets teaches a bistatic device with a fixed unfocussed transmit channel and a fixed focus receive channel and teaches away from variable focus in transmit or receive channels. Both references teach away from the claimed invention.

As a result of the above, there is simply no support for the rejection of Applicants' independent claims 1, 18 and 21 or claims dependent thereon under 35 USC §103. Applicants respectfully request that the Pre-Appeal Panel find that the application is allowed on the existing claims and prosecution on the merits should be closed.